## ISSUE SLIP STAPLE AREA (for additional cross references)

| POSITION                  | . INITIALS | ID NO.   | DATE         |
|---------------------------|------------|----------|--------------|
|                           |            |          | mappelol     |
| FEE DETERMINATION         |            |          | T-V4         |
| O.I.P.E. CLASSIFIER       | 1/1        | 1/2      | 12/12        |
| FORMALITY REVIEW          | 132        | JC3- 283 | 03-15-121    |
| RESPONSE FORMALITY REVIEW |            | 303 203  | 1 (13-13-13) |

## **INDEX OF CLAIMS**

| • | Rejected                   | N   | Non-elected  |
|---|----------------------------|-----|--------------|
|   | Allowed                    | - 1 | Interference |
| _ | (Through numeral) Canceled | Α   | Appeal       |
| ÷ | Restricted                 | _   | Objected     |

| _           |          |          |          |            |          |          |          |           |          |           |                |              |                  |          |           |              |          |  |              |              |           |              |              |          |     |                |            |                         |          |          |              |           |           |              |          |          |
|-------------|----------|----------|----------|------------|----------|----------|----------|-----------|----------|-----------|----------------|--------------|------------------|----------|-----------|--------------|----------|--|--------------|--------------|-----------|--------------|--------------|----------|-----|----------------|------------|-------------------------|----------|----------|--------------|-----------|-----------|--------------|----------|----------|
| CI          | aim      | 4.       | Date     |            |          |          |          |           |          |           |                | C            | Claim Date Claim |          |           |              |          |  |              |              |           |              |              | Date     |     |                |            |                         |          |          |              |           |           |              |          |          |
| اِ ا        | ina      | 7 16 0   |          |            |          |          |          |           | İ        | -         |                |              | 1_               | la<br>La |           |              |          |  |              |              |           |              | 1            |          |     |                | 區          |                         | T        | Τ        | Т            |           |           |              | T        | T        |
| Final       | ő        | 0        | ٩.       |            | 1        | -        |          | İ         |          | -         |                |              | 1 6              | Original | '         |              |          |  |              |              |           |              |              |          | 1   | Final          | Original   |                         |          |          |              |           |           |              |          |          |
|             | K        | )v       | 1        | _          | T        | $\top$   | +        | 7         | 7        | $\dagger$ | Ť              | 1            | F                | 51       | T         | t            | +        | +  | ╈            | +            | ╁         | +            | 十            | $^{+}$   | ┨   | -              | 101        | +                       |          | ╁        | +            | ╀         | +         | +            | ┿        | +-       |
|             | [2       |          | Ţ        |            | $\Box$   |          |          | I         |          | 1         |                | ]            |                  | 52       |           | T            | T        | T  | 1            | T            | $\dagger$ | T            | $\top$       | Ť        | 1   | -              | 102        | 1                       | +        | +        | +            | +         | ╁         | ╁            | +        | +-       |
|             | 3        |          |          |            | 1        |          |          |           |          | $\perp$   |                |              |                  | 53       |           | Γ            |          | Τ  | Ţ            |              | Τ         | T            | Τ.           | T        | 7   | Г              | 103        | $\top$                  | 1        | ┪        | $^{\dagger}$ | +         | ╈         | ✝            | +        | ╁        |
| 4           | 4        | _        |          | ₽          | +        | 4        | 4        | 4         | 4        | 4         | $\bot$         | 4            | L                | 54       |           |              | L        | I  | L            | I            |           | I            | I            |          | ]   |                | 104        |                         |          | İ        |              | 1         | -         | T            | +        | +        |
| 7           | 6        |          | F        | 7          | +        | +        | +        | +         | +        | +         | +              | 4            | $\vdash$         | 55       | +         | -            | ╀        | 1  | ╀            | 1            | ╄         | 1            | _            | $\bot$   | 4   | $\perp$        | 105        | $\perp$                 | $\perp$  |          | $\perp$      |           | $\perp$   | Ι            | Ι        |          |
| -           | 7        | —        | ╁        | +          | ╁        | +        | ╁        | +         | +        | +         | +              | -            | -                | 56<br>57 | _         | ╀            | ╀        | ╁  | ╀            | +            | ╀         | ╀            | +            | +        | -   | <u> </u>       | 106        | 4                       | 4        | ╀        | ┶            | $\perp$   | 1         | 丄            | L        |          |
|             | 8        |          | ╁        | +          | +        | +        | ╁        | +         | +        | +         | ╁              | 1            | $\vdash$         | 58       |           | ╁            | +        | ╁  | ╁            | ╀            | ╁         | +            | +            | ╀        | -   | $\vdash$       | 107        | +                       | +        | +        | +            | +         | +         | $\downarrow$ | $\perp$  | $\perp$  |
|             | 9        | 1        | T        | Ť          | T        | +        | $\top$   | $\dagger$ | +        | +         | +              | 1            | <b>-</b>         | 59       | ┢         | H            | ╁        | +  | ╁            | +            | +         | +            | +            | +        | 1   | $\vdash$       | 109        | +                       | +        | ╁        | +            | ╁         | ╀         | +-           | ╀        | +-       |
|             | 10       |          | L        | I          | I        |          | T        |           | 1        | Ť         | 1              | 1            | $\vdash$         | 60       | T         | T            | T        | +  | t            | +            | t         | ╁            | +            | +-       | 1   | $\vdash$       | 110        | +                       | ┿        | +        | ╁            | ╁         | +         | ╁            | ╁        | ╢        |
| .[]         | 11       |          |          |            |          | L        | Ι        |           |          | Τ         |                | ]            |                  | 61       |           |              | T        | Τ  | T            | $^{\dagger}$ | 1         | T            | $\top$       | +        | 1   | -              | 111        | +                       | ╁        | +        | +            | +         | ┿         | +            | ╁        | ╁┤       |
| $\vdash$    | 12       |          | L        | 1          | $\perp$  | $\perp$  | $\perp$  | Ţ         | Ţ        | I         | I              |              |                  | 62       |           |              |          |  |              | L            | I         |              | Ι            | Ι        | ]   |                | 112        | $\top$                  | T        | †        |              | $\dagger$ | $\dagger$ | t            | t        | Н        |
| H           | 13       |          | -        | $\perp$    | +        | $\perp$  | $\bot$   | +         | 4        | _         | $\perp$        | 4            | <u>_</u>         | 63       | _         | L            | L        | L  |              | Г            | L         | L            | I            |          | ]   |                | 113        | $\perp$                 |          | Ι        | Ι            | I         | Ι         |              | T        | $\Box$   |
|             | 14<br>15 | ├-       | $\vdash$ | +          | +        | +        | +        | +         | +        | +         | $\perp$        | 4            | $\vdash$         | 64       | _         | $\vdash$     | _        | $\perp$  | _            | $\perp$      | _         | $\perp$      | 1            | Ľ        | 1   |                | 114        | $oldsymbol{\mathbb{T}}$ | L        | $\Gamma$ |              | Γ         |           |              | Γ        |          |
|             | 16       | $\vdash$ | -        | +          | +        | +-       | +        | +         | +        | +         | +              | $\downarrow$ | -                | 65<br>66 | <u> </u>  | $\vdash$     | _        | $\vdash$   | <del> </del> | $\vdash$     | ╁         | $\perp$      | $\downarrow$ | ┞-       | ┨ . | <u> </u>       | 115        | 1                       | 1        | L        | Ţ            | L         | L         | L            | L        | $\Box$   |
| $\Box$      | 17       |          | -        | +          | ╁        | +        | +        | +         | +        | +         | +-             | -            | $\vdash$         | 67       | _         | _            |          |  | H            | +            | L         | ╀            | 1            |          | -   | $\vdash$       | 116        | +-                      | $\bot$   | 1        | ┸            | 1         | ╀         | ┸            | Ļ        | Ш        |
|             | 18       |          | $\vdash$ | 1          | ✝        | +        | †        | +         | +        | +         | +              | 1            | $\vdash$         | 68       | -         | -            | -        | -  | H            | +            | ₽         | ╀            | ╀            | +-       | -   |                | 117<br>118 | +-                      | +        | +-       | 1            | ╀         | ╄         | ╁            | $\vdash$ | Н        |
| П           | 19       | П        | Г        | T          | T        | 1        | Ť        | +         | t        | +         | +              | 1            | $\vdash$         | 69       | _         | Н            | -        | ┢╌   | <del> </del> | t            | ╁         | ╁            | +            | ╁        | 1   |                | 119        | ┿                       | ╁        | ╁        | ╁            | $\vdash$  | ╁         | ┞            | ╀        | Н        |
|             | 20       |          |          |            | T        | T        | T        | ╈         | 十        | T         | †              | 1            | $\vdash$         | 70       | _         | _            | $\vdash$ | <del>                                     </del> | $\vdash$     | ╁            | t         | ╁            | +            | ╁        |     | $\vdash$       | 120        | +                       | +        | ╁        | ╁            | ╀         | ╁         | ╀            | ⊢        | Н        |
| $\Box$      | 21       | П        | _        | t          | T        | +        | +        | +-        | +        | ╁         | +              | 1            | $\vdash$         | 71       | _         | _            | -        | $\vdash$   | $\vdash$     | $\vdash$     | ┼         | +            | ╁            | -        | ┨   | $\vdash$       | 121        | ┰                       | ╆        | ╁        | -            | ╁         | ┼-        | ┢            | ├-       | $\vdash$ |
|             | 22       |          |          |            | Γ        |          | T        | 1-        | $\top$   | T         | T              | 1            |                  | 72       | ┪         |              | _        |  | -            | T            | 1         | $\vdash$     | ╁            | ┢        | 1   | _              | 122        | +                       | +-       | +        | ╁╌           | ╁         | ┼-        | ╀            | ⊢        | Н        |
|             | 23       |          |          |            |          |          | Γ        | Ι         |          |           |                | 1            |                  | 73       |           | _            |          |  |              | $\vdash$     |           | T            | 1            | $\vdash$ | 1   |                | 123        | +                       | ╁        | ╆        | H            | t         | ╁╴        | ╁            | ┢        | Н        |
|             | 24       |          |          | 1          | L        | 1_       |          | L         |          | $\Box$    |                |              |                  | 74       |           |              |          |  |              |              |           | 1            |              | Г        | 1   | П              | 124        | $\top$                  | T        | 1        |              | $\vdash$  |           |              | $\vdash$ | Н        |
|             | 25       | $\dashv$ |          | <b>!</b> _ | L        | 1        | $\perp$  | $\perp$   | $\perp$  | $\perp$   | _              |              |                  | 75       |           |              |          |  |              |              | L         |              |              |          |     |                | 125        |                         |          |          |              | T         | 1         |              | Г        | П        |
|             | 26<br>27 |          |          | _          | -        | -        | ╀        | ╀         | $\bot$   | ╄         | ļ              |              | $\vdash$         | 76       | _         | _            |          |  |              | L            |           | L.           |              |          |     |                | 126        |                         |          |          |              |           |           |              |          |          |
|             | 28       |          | _        | $\vdash$   | ┝        | ╁        | ┢        | ╁         | ╁        | ╀         | $\vdash$       |              | H                | 77<br>78 | 4         |              | _        | _  |              | L            | <u> </u>  | L            | L            | _        |     |                | 127        | _                       | ╙        | _        | Ļ            |           | _         |              | L        | Ш        |
|             | 29       | 7        |          | ┢          | ┝        | ╁        | H        | ╁         | ╁        | ╁         | -              |              | -                | /8<br>79 | $\dashv$  | $\dashv$     | -        |  | _            | $\vdash$     | <u> </u>  | -            | H            | -        |     | _              | 128        | +                       | ـ        | <u> </u> | L            | _         | _         |              | $\vdash$ | Ш        |
|             | 30       | ┪        |          |            | ┪        | $\vdash$ | ┢        | ╁         | ╁        | ╁         | $\vdash$       |              | Н                | 80       | +         | $\dashv$     |          |  |              | <u> </u>     | $\vdash$  | ┝            | $\vdash$     | Н        |     | $\rightarrow$  | 29<br>30   | ╁                       | -        | -        | -            | L         | ├         | _            | Ш        | Н        |
|             | 31       |          |          | _          | Ι.       |          | T        | ✝         | t        | ✝         | $\vdash$       |              | Н                | 81       | _         | 7            | 7        | $\dashv$   | _            | -            | $\vdash$  | ⊢            |              |          |     | -              | 31         | ╀                       | -        | -        | -            | H         | ⊢         | H            | H        | $\dashv$ |
|             | 32       |          |          |            |          |          | Г        |           | 1        | T         | П              |              | П                | 82       | 7         | 7            | 7        | $\exists$  |              |              |           | _            | Н            | Н        |     |                | 32         | ╁╌                      | -        | ┢╌       | ┢            | -         | -         | H            | Н        | $\dashv$ |
|             | 33       | $\Box$   |          |            |          |          |          |           |          |           |                |              |                  | 83       |           | ┪            | ᅥ        | $\neg$   |              |              | _         |              |              | Н        |     |                | 33         | T                       | H        |          | -            | $\vdash$  | -         | Н            | Н        | $\dashv$ |
|             | 4        | $\dashv$ |          |            | L        | _        | L        | L         | _        | L         |                |              | -                | 84       |           |              | $\Box$   |  |              |              |           |              |              |          |     |                | 34         | 1                       |          |          |              |           |           |              | П        | ヿ        |
|             | 6        | +        | -        | Н          |          | _        | <u> </u> | $\vdash$  | 1        | -         | Ц              |              |                  | 85       | 4         |              | _        | _[   |              |              |           |              | П            |          | ١ , | -              | 35         |                         |          |          |              |           |           |              |          |          |
|             | 17       | $\dashv$ | $\dashv$ | -          | _        | ⊢        | -        | ├-        | +        | ╀         | $\vdash$       |              |                  | 86       | 4         | _            | 4        |  | 4            | _            | Ц         |              | Ц            | _        |     | -              | 36         |                         |          |          |              |           | Ц         |              |          |          |
|             | 8        | $\dashv$ | $\dashv$ | -          | -        |          | -        | -         | -        | -         | $\vdash\vdash$ |              |                  | 87<br>88 | +         | $\dashv$     |          | $\dashv$   | _            | 4            | $\dashv$  |              | _            | _        |     | _              | 37         | $\vdash$                | L        | Ц        | Щ            |           | Щ         | _            | _        | $\dashv$ |
|             | 9        | +        | $\dashv$ | -1         |          |          | -        | $\vdash$  | $\vdash$ | -         | H              | ł            |                  | 39       | +         | +            | $\dashv$ | $\dashv$   | $\dashv$     | $\dashv$     | $\dashv$  | $\dashv$     | $\dashv$     | $\dashv$ |     | _              | 38         | ┼                       | H        |          | Щ            |           | Щ         | 4            | 4        | -        |
| <del></del> | 0        | +        | _        |            | _        | $\vdash$ | Н        | $\vdash$  | $\vdash$ | $\vdash$  | Н              |              | _                | 90       | +         | $\dashv$     | +        | $\dashv$   | ⊣            |              | $\dashv$  | ᅱ            | $\dashv$     | $\dashv$ |     | _              | 39<br>40   | +                       | Н        | Н        | Н            | _         | Н         | $\dashv$     | $\dashv$ | $\dashv$ |
|             | 1        | 1        | 7        | $\dashv$   |          | Н        | Н        | H         |          | $\vdash$  | $\dashv$       | ł            | _                | )1       | +         | +            | +        | +  | +            | $\dashv$     | $\dashv$  | $\dashv$     | $\dashv$     | ᅱ        | -   | _              | 40<br>41   | $\vdash$                | Н        | Н        | -            | -         |           | -            | -{       | $\dashv$ |
| ( 4         |          | _        | 7        | $\dashv$   |          | Н        |          | $\vdash$  | $\vdash$ |           | H              | ł            |                  | 2        | +         | +            | +        | $\dashv$   | $\dashv$     | $\dashv$     | -1        | $\dashv$     | $\dashv$     | $\dashv$ |     | -              |            | $\vdash$                | Н        | $\dashv$ | -            | -         |           | $\dashv$     | $\dashv$ | $\dashv$ |
| 4           |          |          |          |            |          |          |          |           | Γ        |           | $\dashv$       | - 1          |                  | 33       | $\dagger$ | +            | $\dashv$ | 7  | $\dashv$     | $\dashv$     | ┪         | -            | +            | $\dashv$ |     | <del>'</del> 1 | 42<br>43   | $\vdash$                | Н        | $\dashv$ | $\dashv$     |           | -         | -            | $\dashv$ | $\dashv$ |
| 4           | 4        | $\bot$   | $\Box$   | $\Box$     |          |          |          |           | Γ        |           |                | Ì            |                  | 94       | $\top$    | $\dagger$    | 7        | 7  | 寸            | 7            | 7         | _            | $\dashv$     | $\dashv$ | Ì   |                | 44         | $\vdash$                | $\dashv$ | -        | ┪            | $\dashv$  | $\dashv$  | $\dashv$     | $\dashv$ | $\dashv$ |
| 4           |          | 4        | _[       | $\Box$     |          |          |          |           |          |           |                |              |                  | 5        | I         | 1            |          |  |              |              | _         |              | 7            | ┪        | - 1 | ħ.             | 45         | H                       |          | 7        | $\dashv$     |           |           | 寸            | $\dashv$ | $\dashv$ |
| 4           |          | 4        | 4        | 4          |          |          | _        |           |          |           | $\Box$         |              |                  | 6        | $\perp$   | T            | I        | $\Box$   |              |              |           |              |              |          | ı   | 14             | 16         |                         |          |          | $\dashv$     | $\dashv$  | 7         | 7            | 7        | ヿ        |
| 4           |          | +        | 4        | 4          | _        | $\dashv$ | $\dashv$ |           |          |           | _              | ļ            |                  | 7        | $\perp$   | $\downarrow$ | $\perp$  | $\perp$  |              | _[           |           |              |              | Ţ        | [   |                | 47         |                         |          |          |              |           |           |              |          |          |
| 4!          |          | +        | +        | $\dashv$   | $\dashv$ | $\dashv$ |          | $\vdash$  | Ц        | $\dashv$  | $\dashv$       | -  -         |                  | 8        | $\perp$   | 4            | 4        | 4  | 4            | 4            | 4         | $\downarrow$ | _            | _]       |     |                | 18         | П                       | $\Box$   | I        | $\Box$       | $\Box$    | $\Box$    | I            | I        |          |
| 50          |          | +        | +        | $\dashv$   | $\dashv$ | +        | -        | $\dashv$  | $\vdash$ | -         | $\dashv$       | +            |                  | 9        | +         | +            | +        | +  | 4            | 4            | -         | 4            | +            | 4        |     | 1.             | 19         | $\sqcup$                | 4        | 4        | _            | _ļ        | 4         | $\downarrow$ | 4        | _        |
|             | -1-      |          | _        | <b>—</b>   |          |          | _        |           |          |           |                | L            |                  | м_       |           | _L           |          | L  |              |              |           |              |              | ┙        | L   | n:             | 50         | Ш                       |          |          |              | 1         |           | $\perp$      | 丄        | ┙        |

If more than 150 claims or 10 actions staple additional sheet here